

IN THE CLAIMS

Please add the following new claims 13-20:

2. ~~13.~~ A method for limiting transmit power of a radio operating in a
2 radio communications system, the radio communications system comprising
a plurality of base stations that transmit power control commands to the
4 radio, the radio comprising a variable gain amplifier and a maximum gain
setting, the method comprising the steps of:
6 receiving a signal from at least one of the plurality of base stations;
generating a received power level signal in response to the received
8 signal;
generating a closed loop power control signal in response to the
10 received signal;
combining the received power level signal and the closed loop power
12 control signal to produce a summation signal;
comparing the summation signal to the maximum gain setting;
14 adjusting the variable gain amplifier in response to the maximum gain
setting if the summation signal is greater than or equal to the maximum gain
16 setting; and
adjusting the variable gain amplifier in response to the summation
18 signal if the summation signal is less than the maximum gain setting. --

3. ~~14.~~ The method of claim 13 further including the step of adjusting
2 the maximum gain setting in response to a temperature of the variable gain
amplifier. --

4. ~~15.~~ A method for limiting transmit power of a radio operating in a
2 cellular environment, the cellular environment comprising a plurality of
cells that transmit power control commands to the radio, the radio
4 comprising a variable gain amplifier, a maximum gain setting, and a power
limiting accumulator, the method comprising the steps of:
6 receiving a signal from at least one of the plurality of cells;
generating a received power level signal in response to the received
8 signal;

generating a closed loop power control signal in response to the
10 received signal;
digitizing the received power level signal;
12 comparing the digitized received power level signal to the maximum
gain setting;
14 decreasing the gain of the variable gain amplifier if the digitized
received power level signal is greater than the maximum gain setting; and
16 prohibiting the closed loop power control signal from changing in
response to the power control commands if the digitized received power level
18 signal is greater than the maximum gain setting. --

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-- 16. A method for limiting transmit power of a radio operating in a
2 cellular environment, the cellular environment comprising a plurality of
cells that transmit power control commands to the radio, the radio
4 comprising a variable gain amplifier, a maximum gain setting, and a power
control command accumulator, the method comprising the steps of:
6 receiving a signal from at least one of the plurality of cells;
generating a received power level signal in response to the received
8 signal;
generating a closed loop power control signal in response to the power
10 control commands;
digitizing the received power level signal;
12 comparing the digitized received power level signal to the maximum
gain setting;
14 decreasing the closed loop power control signal by a predetermined
amount for every predetermined unit of time until the closed loop power
16 control signal is less than the maximum gain setting if the digitized received
power level signal is greater than the maximum gain setting; and
18 varying the gain of the variable gain amplifier in response to the closed
loop power control signal if the digitized received power level signal is less
20 than or equal to the maximum gain setting. --

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-- 17. A method for limiting transmit power of a radio operating in a
2 cellular environment, the cellular environment comprising a plurality of

cells that transmit power control commands to the radio, the radio
4 comprising a variable gain amplifier, a maximum gain setting, and a power
limiting accumulator, the method comprising the steps of:

6 receiving a signal from at least one of the plurality of cells;
generating a received power level signal in response to the received
8 signal;

generating a closed loop power control signal in response to the power
10 control commands;

digitizing the received power level signal;

12 determining a difference between the digitized receive power level
signal and the maximum gain setting;

14 integrating the difference to generate a gain control signal, the gain
control signal being limited to a predetermined range;

16 adjusting the variable gain amplifier with the gain control signal; and
prohibiting the closed loop power control signal from changing the
18 variable gain amplifier in response to the power control commands if the
gain control signal is less than a predetermined value. --

1.

--18. A radio performing transmit power calibration, operating in a
2 cellular environment comprising a plurality of cells that transmit power
control commands to the radio, the radio receiving signals through a variable
4 gain receive amplifier the radio comprising:

a receive power detector, coupled to the receive amplifier, for
6 generating a received power level signal;

a saturating accumulator, coupled to the receive amplifier, for
8 generating a closed loop power control signal in response to the power
control commands;

10 a power limiting circuit, coupled to the receive power detector and the
saturating accumulator, for generating a limiting gain control setting in
12 response to the closed loop power control signal and the received power level
signal, the limiting gain control setting being within a predetermined range;

14 a signal combiner, coupled to the receive power detector, the saturating
accumulator and the power limiting circuit, for combining the received